

Title (en)
METHOD AND DEVICE FOR THE SENSOR REDUCED REGULATION OF A PERMANENT MAGNET EXCITED SYNCHRONOUS MACHINE

Title (de)
VERFAHREN UND VORRICHTUNG ZUR SENSORREDUZIERTEN REGELUNG EINER PERMANENTMAGNETERREGTEN SYNCHRONMASCHINE

Title (fr)
PROCEDE ET DISPOSITIF DE REGLAGE LIMITE PAR CAPTEUR D'UNE MACHINE SYNCHRONE A EXCITATION PAR AIMANT PERMANENT

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Abstract (en)
[origin: WO03094338A1] The invention relates to a method and a device for field orientated regulation of a permanent magnet excited synchronous machine (8). A longitudinal voltage component (ud) and a transversal voltage component (ua) of the control voltage for the synchronous machine (8) is determined (19) by using a stationary machine model of a decoupling network (19) from a determined transversal current set-point value (IsaSoll) and information on the rotational speed (n). Said voltage components are converted into control impulses (ua, ub, uc) for the synchronous machine (8). According to the invention, the regulation system does not require any information on the phase flows of the multi-phase-rotational flow system.

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